DOCUMENT RESUME

ED 117 823 EA 007 880

AUTHOR Zuelke, Dennis C.; Frohreich, Lloyd E.
TITLE Collective Negotiations and Teachers' Salaries: Some Evidence from Wisconsin.
PUB DATE [75]
NOTE 13p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS *Collective Bargaining; Collective Negotiation; Correlation; Elementary Secondary Education; Multiple Regression Analysis; *Socioeconomic Influences; *State Surveys; *Statistical Surveys; Tables (Data); *Teacher Salaries
IDENTIFIERS *Wisconsin

ABSTRACT

This study investigated the relationship between collective negotiations and teacher salaries in Wisconsin public school districts. Data were collected from a random sample of 324 Wisconsin school districts with professional staffs ranging from 30 to 500 members. A six-indicator index was developed to measure the comprehensiveness of collective negotiations in each district. This negotiations index and 11 other determinant variables were studied in relation to 10 different measures of teacher salaries. Stepwise multiple regression analysis found negative correlations between the collective negotiations index and all levels of scheduled and actual teacher salaries. The authors concluded that collective negotiations do not have a significant positive effect on teacher salaries in Wisconsin and that a negative effect is likely. In addition, they found that socioeconomic conditions in a school district, especially level of personal income and percentage of urban population, have the strongest positive impact on teacher salaries. (Author/JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED117823

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

COLLFCTIVE NEGOTIATIONS AND TEACHERS' SALARIES: SOME EVIDENCE FROM WISCONSIN

by

Dennis C. Zuelke and Lloyd E. Frohreich

There is continuing debate and discussion in the literature concerning the relative impact of collective negotiations on teacher salaries. An article by Thornton[1] in the Phi Delta Kappan dissented from Smith's[2] conclusion, also in the Kappan, that negotiations may have had minimal effects on teachers' salaries. Earlier, Thornton[3] had questioned Kasper's empirical interstate study over the same issue which found that "There is no statistically significant positive effect of teacher organizations on salaries, once other variables such as income and urbanization are taken into account."[4] Others[5] have joined the debate in recent years in an attempt to determine the effects of collective negotiations on teacher salaries. Results have ranged from Balfour's[6] findings of a negative association to Thornton's[7] high positive association at the Master's degree maximum scheduled salary.

Research efforts to date have been limited primarily to large school districts or metropolitan areas where empirical data were readily available. Entire states have been used as the principal unit of observation. However, the vast majority of local school districts are either small or medium sized and often rural in nature. Perhaps these districts have not felt the need for or the impact of collective negotiations. It was evident to us that they were and still are in need of study on a larger scale.

EA 007 880

Selection of School Districts

In the research we conducted, data were collected on an appropriate random sample of K-12 public school districts in Wisconsin. The population consisted of 324 districts and excluded the largest (over 500 professional staff members) as well as the smallest (under 30 professional staff members) districts and comprised around 75 percent of all public school districts in Wisconsin. The districts sampled averaged around 2,000 in pupil enrollment. Teachers and school boards have been negotiating in Wisconsin since the early 1960's, and we assumed that observations of this phenomenon would be reflected by strong positive relationships between teacher salaries and collective negotiations in those districts studied.

Collective Negotiations Index

Virtually all school districts in Wisconsin during the 1972-73 school year engaged in formal collective negotiations with teachers on issues such as salaries, hours, and conditions of employment. Because of this, a six-indicator composite negotiations index was developed to determine the degree to which each district had a comprehensive or well developed negotiations relationship between teachers and the school board. The six indicators were selected statistically from an initial set of fifteen indicators after different combinations had been examined through multiple regression analysis. The six indicators of negotiations comprehensiveness which survived the statistical screening and comprised the final index were as follows:

1. An accumulative index for salary adjustments existed and was part of the negotiated salary schedule, e.g., increases based on ratios generated from B.A. minimums, B.A. + 12 credits, B.A. + 24 credits, M.A. + 10 credits, etc.; or a percentage increment structure.

2. A procedure existed, including a timetable, for opening negotiations prior to the expiration of the existing agreement and was incorporated in the negotiated agreement.

3. The school board paid part or all of the teacher's contributions to the State Teachers Retirement System in the negotiated agreement.

4. There existed a standing teacher negotiating committee composed of the district's teachers which functioned during contract negotiations and during the term of the agreement.

5. The availability of a Wisconsin Federation of Teachers, Wisconsin Education Association Council or UNISERV representative to local teacher representatives during negotiations leading to the negotiated agreement.

6. The existence of formal collective negotiations between the school board and one or more employee groups besides teachers during bargaining leading to the negotiated agreement.

All indicators of negotiations comprehensiveness were weighted by a fifteen-member tripartite panel of experts composed of employer-employee relations specialists, administrators, and teacher-organization representatives who rated each indicator's importance to a well developed teacher-school board negotiations relationship. The weighted scores for the number of indicators existing during the negotiations were summed and divided by the total number of indicators (6) for each district. The resulting mean score represented the degree of negotiations comprehensiveness in a school district.

Salary Levels and Other Determinant Variables

The negotiations comprehensiveness score and eleven other determinant variables were studied along with ten different average and scheduled measures of teacher salaries. Both scheduled and actual average salaries were used to reflect those salaries subject to direct negotiations and those representing actual economic benefits to teachers. The eleven determinant variables were studied because of the assumption of their influence on teacher salaries based on the literature and previous research. These variables were:

1. Adjusted gross income per capita
2. Percent of total general property tax rate for K-12 education
3. Percent of total revenue and non-revenue receipts for K-12 education provided by the local public school district
4. Average monthly salary for accountants in the area of the observed school district
5. Percent of population living in urbanized places
6. Pupil-teacher ratio
7. Teacher turnover
8. Pupil enrollment
9. Length of teacher school year
10. Percent of teachers with substandard qualifications
11. Region (upstate or downstate)

Collective Negotiations Index Versus Teacher Salary Levels

The results of the stepwise multiple regression analysis between the ten measures of teacher salary and the index of collective negotiations are listed in Table I. Unexpected negative correlations were found between the index of collective negotiations and all levels of scheduled and actual teacher salaries. The negative correlations were significant between the index and minimum scheduled B.A., minimum scheduled M.A., actual average B.A. and the general average salary for the districts observed. The above implies that a more comprehensive collective negotiations arrangement was associated with significant decreases in B.A. minimum, M.A. minimum, actual B.A. and actual average salaries.

As the successful practice of teacher-school board collective negotiations hinges on the ability to reasonably predict results given existing situations, the consistent negative relationship between comprehensive collective negotiations and teacher salaries portends ominous implications for practice to teachers' organizations. The assumption of a positive association between strong collective negotiations and teacher salary levels, either scheduled or actual, did not hold. Each point increase in the collective negotiation's index corresponded to decreases in the amounts listed in column four of Table I. Where the decreases were statistically significant they ranged from $99.27 at the scheduled minimum M.A. level to $242.87 for the general average salary. These decreases suggest that a comprehen-

TABLE I

RELATIONSHIP OF COLLECTIVE NEGOTIATIONS
TO TEACHER SALARIES IN WISCONSIN

Salary Measure	Partial Correlation Coefficient (r^2)	Level of Significance	Dollar Changes in Salary as CNI* Increases	Multiple Correlation Coefficient (R^2)
Actual Salary				
Average BA	−.251	.10	−$175.48	.5564
Average MA	−.060		− 82.14	.5855
**Average 0-4 Years	−.211		− 94.61	.5940
**Average 5-9 Years	−.127		− 107.29	.5348
**Average 10 Years+	−.157		− 183.43	.7007
General Average	−.276	.10	− 242.87	.6879
Scheduled Salary				
Minimum BA	−.416	.01	− 99.42	.6471
Maximum BA	−.002		− 2.74	.5169
Minimum MA	−.352	.05	− 99.27	.5229
Maximum MA	−.174		−199.47	.7764

*Collective Negotiations Index
**Average salaries for teachers with 0-4 years of experience, 5-9 years of experience and 10 years of experience and above.

sive negotiations arrangement at the local level may be a losing proposition for teachers in Wisconsin. The fact that no significant positive relationship existed for six of the salary measures further implies that comprehensive collective negotiations, generally speaking, has little impact on teacher salaries.

As local teachers' organizations in Wisconsin strive to improve or strengthen the negotiations relationship vis-a-vis school boards, they may not be rewarded with improved salaries relative to other school districts. Other factors, as our research indicated, may serve to improve teacher salaries, but increasing the comprehensiveness of the collective negotiations relationships probably will not.

Determinant Variables Versus Teacher Salary Levels

The total variance in teacher salaries explained by the twelve determinant variables ranged from under 52 percent (scheduled maximum B.A.) to nearly 78 percent (scheduled maximum M.A.) among the ten salary measures and ten regression models. These percentages indicated that the determinant variables utilized in the research explained most of the total variance in each measure of teacher salary. We realized, however, that enough of the variance was left unexplained so that the addition of still other variables might well have accounted for more of the total variance.

Among the determinant variables, adjusted gross income per capita in the school district and percentage of urbanized population in the school district had the strongest positive relationships with teacher

salary levels. Increases in these two determinants were consistently associated with increases in all measures of teacher salary. In nine out of the ten measures of salary, at least one of the above two determinants accounted for more of the total variance in the teacher salary measure than the other determinant variables combined. By contrast, the amount of variance in teacher salaries accounted for by the collective negotiations index ranged from zero percent to 10.5 percent among the ten salary measures. If one wanted to project increases in teacher salaries, adjusted gross income per capita and percentage of urbanized population would be the two best predicators upon which to base projections.

There were several variables in the study which proved to have virtually no relationship to teacher salary levels. Pupil enrollment, percentage of total local tax rate for K-12 educational purposes, region (upstate or downstate), and length of teacher school year had no significant relationship to any of the salary levels. The remaining independent variables (noted earlier) were found to be significantly related to at least one or more of the teacher salary measures.

One of the problems faced by researchers is measuring the influence of salary levels in neighboring school districts on salaries in an observed district. This is the problem of measuring the much alluded to "spillover" effect. We used the Cooperative Educational Service Agency (CESA) in Wisconsin as our neighborhood variable. Each agency serves an average of 23 school districts in the same geographical area with staff assistance for instructional and/or planning purposes.

The "spillover" effect accounted for over 54 percent of the total variance in scheduled minimum B.A. salary and almost 43 percent of the scheduled maximum B.A. salary. It had negligible effects, however, on scheduled M.A. minimum and maximum salaries. We surmised that a school district is influenced by surrounding districts at bachelor's degree salary levels because considerably more teachers already in the district and in the employment entrance pool have bachelor's degrees than master's degrees. Therefore, a school district's scheduled B.A. salary must be competitive with salaries offered by neighboring districts.

Conclusions

We do not believe collective negotiations has a significant positive effect on teacher salaries in Wisconsin. Indeed, a negative effect is likely. Given the length of time formal teacher-school board collective negotiations have been in existence in Wisconsin, this conclusion is surprising. Possibly, the short term effect of teacher-school board collective negotiations has run its course in Wisconsin (and perhaps elsewhere). In the short term, negotiations have been reported in some previous research to have an initial positive impact on teacher salaries. Our study may well have found the long term effect where negotiations' positive influence on salaries has not only peaked and leveled off but is now on the decline.

We concluded, without reservation, that socio-economic conditions in a school district generally have the strongest positive impact on teacher salaries. Beyond personal income and percentage of urban

population in a school district, scheduled B.A. salaries in proximate school districts are the most important influence on scheduled B.A. salaries.

These conclusions do not preclude the necessity for or the significance of local teacher-school board negotiations on non-salary matters. They do suggest that negotiating salary adjustments at the local school district level is not particularly useful to local teachers' organizations. Concern over the loss of local control aside, perhaps regional or statewide negotiations would be more appropriate for setting base teacher salaries. Teachers and school boards could then be relieved of the inordinately time-consuming necessity of negotiating locally over salary related matters that too often lead to impasses, strikes, and ill-will between teachers, school boards and administrators. Locally, concerted efforts on the part of the education community and others to improve the per capita income and general socio-economic level through the development of business, industry, housing and public services would appear to enhance the teachers' probability of greater economic rewards.

Our research, we hope, has contributed to the resolution of the continuing debate over the relationship of collective negotiations to teacher salaries with some evidence from small to intermediate sized school districts. Our study essentially supported Kasper's perception of the impact of unionism on teacher salaries as "much hard work for little financial return."[8] Certainly, we cannot agree with those who unalterably contend that collective negotiations has a

strong positive impact on teacher salaries over the long term.

FOOTNOTES

[1]Robert J. Thornton, "Collective Negotiations and Teachers' Salaries: A Dissenting View," Phi Delta Kappan, LIV (June, 1973), 682.

[2]Allen W. Smith, "Have Collective Negotiations Increased Teachers' Salaries?," Phi Delta Kappan, LIV (December, 1972), 268-270.

[3]Robert J. Thornton, "The Effects of Collective Negotiations on Teachers' Salaries," Quarterly Review of Economics and Business, II (Winter, 1971), 37-47.

[4]Hirschel Kasper, "The Effects of Collective Bargaining on Public School Teachers' Salaries," Industrial and Labor Relations Review, 24 (October, 1970), 57-72.

[5]See, for example, David B. Lipsky and John E. Drotning, "The Influence of Collective Bargaining on Teachers' Salaries in New York State," Industrial and Labor Relations Review, 27 (October, 1973), 18-35.

[6]Alan G. Balfour, "More Evidence That Unions Do Not Achieve Higher Salaries for Teachers," Journal of Collective Negotiations In The Public Sector, 3 (Fall, 1974), 289-303.

[7]Thornton, op. cit., p. 682.

[8]Kasper, op. cit., p. 69.